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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/613,605

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David DeRogatis

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PATENT DEPARTMENT
2001 ROSS AVENUE
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EXAMINER

GARCIA, ERNESTO

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/613,605	Applicant(s) DEROGATIS ET AL.	
	Examiner Ernesto Garcia	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2006 and 20 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-8,11-17,29-34 and 49-64 is/are pending in the application.
- 4a) Of the above claim(s) 6,12,14-17 and 29-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7,8,11,13 and 49-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2006 and 05 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election and Restriction

Claims 6, 12, 14-17, and 29-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 13, 2005.

Drawings

The drawings received on July 5, 2006. These drawings are acceptable; however, the drawings contain discrepancies.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the fastening device, i.e., the screw, disposed within the aperture (claims 54, 55, 63, and 64), the fastener being non-metallic (claim 51), plastic (claim 52), and rubber (claim 52) must be shown

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or the feature(s) canceled from the claim(s). No new matter should be entered. Note that Figure 15B shows metal instead of plastic or rubber.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the ridges 211A disposed on an exterior surface of the first portion as described on page 19, lines 15-17. Currently, the drawings show the ridges internal of the exterior surface and thus not on the exterior surface (see original drawings filed with parent application 10/613,605).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "211A" (Figures 15 and 15A), and "213A" (Figures 15 and 15A) have been both used to designate the same ridge.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "211B" (Fig. 15B) and "213B" (Figure 15B) have been both used to designate the same ridge.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "222A" (Figures 15 and 15A) and "222B" (Figure 15B) have both been used to designate the same stop.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

in paragraph 0058, on page 21, the description of aperture 216B is not accurate since aperture 216B is not sized and shaped to accommodate standard-sized tools, but rather is countersink as described in paragraph 0051 and shown in Figure 15B.

Appropriate correction is required.

Claim Objections

Claims 52 and 61 are objected to because of the following informalities:

regarding claims 52 and 61, "plastics" in line 2 should be --plastic--. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 13, and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 8, the recitation "said first engaging surface", in line 1, lacks proper antecedent basis since "a first engaging surface" has not been previously recited.

Regarding claim 13, the recitation "said mating surface", in line 1, lacks proper antecedent basis since "a mating surface" has not been previously recited.

Regarding claim 50, "the opening" in line 2 and "the picket" in lines 2-3 lack proper antecedent basis because "a picket having an opening" has not been previously recited.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 26 and 38 of copending Application No. 11/278,510. Although the conflicting claims are not identical,

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they are not patentably distinct from each other because the railing assembly as claimed in the copending application claims the plug fastener as claimed in the instant application. It would have been obvious to one of ordinary skill in the art that the additional rail assembly elements of the patent claims are not precluded by the instant claims to the plug fastener.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

Claims 1,7, 8, 11, 13, 49-52, 54, 56-61, and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Rapata, 3,539,234 (see marked-up attachment).

Regarding claim 1, Rapata discloses, in Figure 16, a plug fastener **10d** comprising a first engaging portion **A1** and a second engaging portion **A2**. The first engaging portion **A1** has first ridges **14d**. The second engaging portion **A2** has second ridges **14d**. The first ridges **14d** are slanted with respect to the second ridges **14d**. An aperture **A3** extends through the plug fastener. The first ridges **14d** and the second ridges **14d** are concentric with respect to the aperture **A3**.

Regarding claim 7, at least one of the first ridges **A1** or the second ridges **A3** comprises an angled top surface **A5**. The angled top surface provides the slant of the first ridges **14d** or the second ridges **14d**.

Regarding claims 8 and 13, the fastener has a shape selected from a group consisting spheroidal, cylindrical, ellipsoidal, conical, elliptic conical frustum, pyramidal frustum, and ball.

Regarding claim 11, the first ridges **14d** and the second ridges **14d** are deformable ridges.

Regarding claim 49, at least one of the first ridges **14d** is slanted in a direction opposite than a direction of at least one of the second ridges **14d**. At least one of the second ridges **14d** is slanted in a direction opposite than at least one of the first ridges **14d**.

Regarding claim 50, the first ridges **14d** and the second ridges **14d** have sufficient resiliency.

Regarding claims 51 and 60, the fastener is non-metallic.

Regarding claims 52 and 61, the fastener comprises plastic (see cross-sections in Figures 1, 3, 7, and 15).

Regarding claim 54, the plug fastener **10d** further comprises a fastening device **40** disposed within the aperture (see Figure 1).

Regarding claim 56, the first engaging portion **A1** and the second engaging portion **A2** define a substantially spheroidal shape.

Regarding claim 57, Rapata discloses in Figure 16, a substantially plug fastener **10h** comprising an aperture **A3**, a first hemisphere **A1**, and a second hemisphere **A2**. The aperture **A3** extends through the plug fastener and has a first opening **A7** and a second opening (below opposite to **A7**). The first hemisphere **A1** has first ridges **14d** concentric and orthogonal with respect to the aperture **A3**. The first hemisphere **A1** includes the first opening **A7**. The second hemisphere **A2** has second ridges **14h** concentric and orthogonal with respect to the aperture **A3**. The second hemisphere **A2** includes the second opening. Ends of the first ridges **14h** and the second ridges **14h** are tapered respectively from the first opening and the second opening towards a maximum diameter of the fastener **10h** (note that the ridges are curved such that half of the curved is tapered towards the maximum diameter).

Regarding claim 58, the first ridges **14h** and the second ridges **14h** are deformable ridges (col. 5, lines 22-30).

Regarding claim 59, the first ridges **14h** and the second ridges **14h** have sufficient resiliency.

Regarding claim 63, the plug fastener further comprises a fastening device **40** disposed within the aperture **A3**.

Claims 1, 7, 8, 11, 13, 49, and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Waldron, 3,438,659.

Regarding claim 1, Waldron discloses, in Figure 14, a plug fastener **42** comprising a first engaging portion and a second engaging portion. The first engaging portion has first ridges **47**. The second engaging portion has second ridges **47**. The first ridges **47** are slanted with respect to the second ridges **47**. An aperture **A3** (see marked-up attachment) extends through the plug fastener **42**. The first ridges **47** and the second ridges **47** are concentric with respect to the aperture **A3**.

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Regarding claim 7, at least one of the first ridges **47** or the second ridges **47** comprises an angled top surface **A5**. The angled top surface provides the slant of the first ridges or the second ridges.

Regarding claims 8 and 13, the fastener has a shape selected from a group consisting spheroidal, cylindrical, ellipsoidal, conical, elliptic conical frustum, pyramidal frustum, and ball.

Regarding claim 11, the first ridges **47** and the second ridges **47** are deformable ridges.

Regarding claim 49, at least one of the first ridges **47** is slanted in a direction opposite than a direction of at least one of the second ridges **47**. At least one of the second ridges **47** is slanted in a direction opposite than at least one of the first ridges **47**.

Regarding claim 50, the first ridges **47** and the second ridges **47** have sufficient resiliency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 53, 54, 55, 57, 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harder, 6,932,329, in view of Astl, 5,131,783.

Regarding claim 1, Harder discloses, in Figures 7 and 8, a plug fastener **23** comprising a first engaging portion **A1** and a second engaging portion **A2**. The first engaging portion **A1** has first ridges **37,38**. The second engaging portion **A2** has second ridges **39,40**. An aperture **41** extends through the plug fastener **23**. The first ridges **37,38** and the second ridges **39,40** are concentric with respect to the aperture **41**. However, Rapata fails to disclose the first ridges **37,38** slanted with respect to the second ridges **39,40**. Astl teaches, in Figure 5, different types of ridges for being more rigid due to greater supporting area (col. 3, lines 61-68). In particular, the fourth embodiment provides the first ridges being slanted with respect to the second ridges when the ridges of Harder are substituted for those of Astl. Therefore, as taught by Astl, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the ridges of Harder with any known ridge design so that the

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ridges cover more surface area. Given the modification, the first ridges become slanted with respect to the second ridges.

Regarding claim 53, the aperture **41** further comprises at least one countersink **42** formed at one end of the aperture **41**.

Regarding claims 54 and 63, the plug fastener **23** further comprises a fastening device **24** disposed within the aperture **41** (see Figure 5).

Regarding claims 55 and 64, the fastening device **24** is a screw.

Regarding claim 57, Harder discloses in Figures 6 and 7, a substantially plug fastener **23** comprising an aperture **41**, a first hemisphere **A1**, and a second hemisphere **A2**. The aperture **41** extends through the plug fastener and has a first opening **A7** and a second opening **A8**. The first hemisphere **A1** has first ridges **37,38** concentric and orthogonal with respect to the aperture **41**. The first hemisphere **A1** includes the first opening **A7**. The second hemisphere **A2** has second ridges **39,40** concentric and orthogonal with respect to the aperture **41**. The second hemisphere **A2** includes the second opening **A8**. However, Harder fails to disclose ends of the first ridges **37,38** and the second ridges **39,40** being tapered respectively from the first opening and the second opening towards a maximum diameter of the fastener **23**. Astl teaches, in Figure 5, different types of ridges for being more rigid due to greater

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supporting area (col. 3, lines 61-68). In particular, the fourth embodiment provides the ends of the first ridges and the second ridges being tapered respectively from the first opening and the second opening towards a maximum diameter of the fastener when the ridges of Harder are substituted for those of Astl. Therefore, as taught by Astl, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the ridges of Harder with any known ridge design so that the ridges cover more surface area. Given the modification, the ends of the first ridges and the second ridges become tapered respectively from the first opening and the second opening towards the maximum diameter of the fastener **23**.

Regarding claim 62, the aperture 41 further comprises at least one countersink **42** formed in the first opening.

Response to Arguments

Applicant's arguments with respect to claims 1, 7, 8, 11, 13, and 49 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McConnell, 4,579,324, shows a spheroid having ridges.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. In particular, the new limitation "an aperture extending through the plug fastener, the first and second ridges concentric with respect to the aperture" in claim 1, lines 10-11, necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-282-7083. The examiner can normally be reached from 9:30-5:30. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E.G.

A handwritten signature in black ink that reads "Daniel P. Stodola". The signature is written in a cursive style with a large, looped initial 'D'.

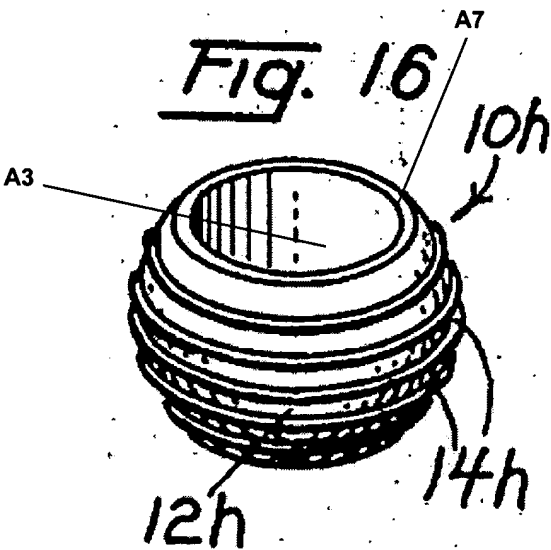
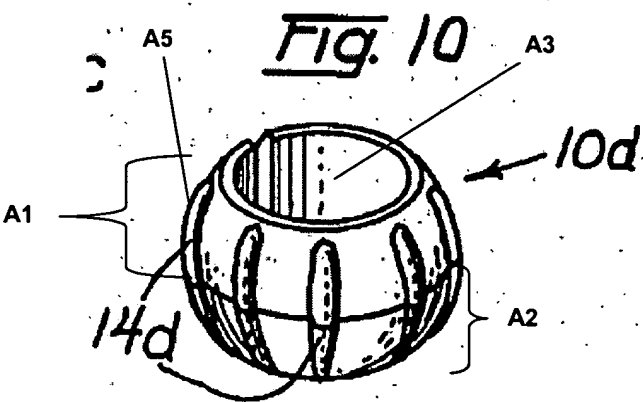
E.G.

September 7, 2006

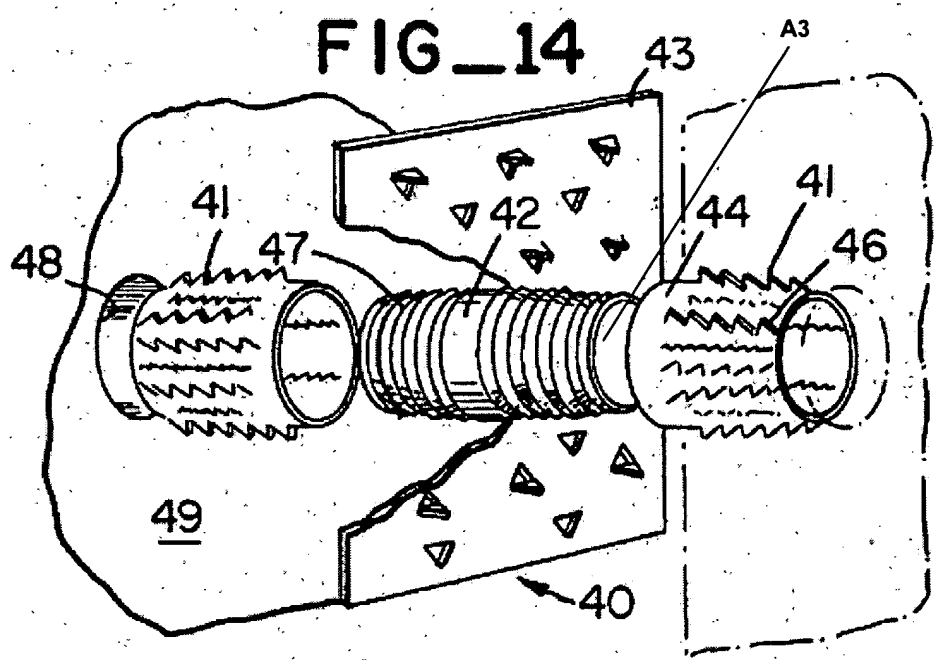
Attachments: one marked-up page of Rapata, 3,539,234
one marked-up page of Waldron, 3,438,659
one marked-up page of Harder, 6,932,329

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Rapata, 3,539,234



Waldron, 3,438,659



Harder, 6,932,329

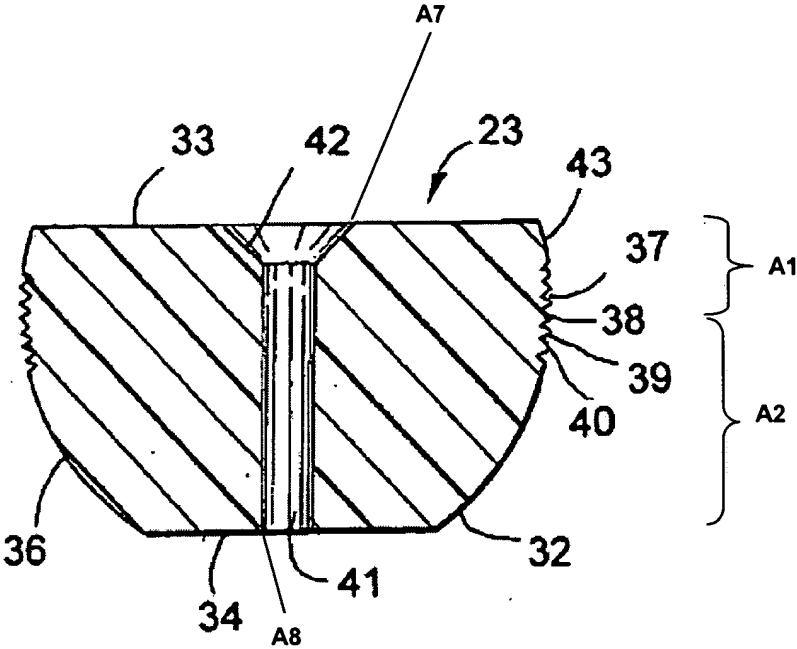


FIG. 8